

Application No.: 10/679,607

Docket No.: 200400266-1

Remarks

Claims 1, 3, 6-16, and 18-24 were pending. Applicants thank the Examiner for his review of the pending claims. In response to Applicants' previous Response to Office Action filed June 26, 2006, the Examiner has applied new grounds of rejection to claims 1, 3, 6-16, and 18-24.

In this paper, Applicants have amended claims 1, 7, 8, 14, and 24. No claims have been canceled or added. Claims 2, 4, 5, and 17 were previously canceled. Therefore, claims 1, 3, 6-16, and 18-24 remain pending.

Pursuant to 37 CFR 1.114, a Request for Continued Examination and the appropriate fee are being filed concurrently with this paper. Therefore, entry and consideration of this amendment are proper and requested. Applicants respectfully request reconsideration of the presently pending claims in view of amendments provided above and for the following remarks.

Objection to the Specification

The Examiner has objected to the specification because paragraph 0015 includes a typographical oversight. Applicants respectfully submit that the above-described amendment to the specification overcomes the objection. Accordingly, the objection to the specification should be withdrawn.

Claim Rejections Under 35 U.S.C. § 102

Claims 8, 9, 11-15, 21, and 24 were rejected under 35 U.S.C. 102(e) as being anticipated by Arcaro et al. (U.S. Patent No. 6,902,643). Applicants respectfully

Application No.: 10/679,607

Docket No.: 200400266-1

traverse the rejection.

A. Independent Claims 8, 14, and 24

In the Office Action, in relation to claim language reciting "a first side of a printed medium against the heated roll," the Examiner interpreted the term "against" broadly. Page 3 of the Office Action states:

["Against"] is not being interpreted as meaning that the first side is "directly in contact with" the heating roller. The first side is being interpreted to be against the heated roll in terms of proximity, although its direct contact with the roll is through the second side.

Although Applicants do not necessarily agree with this interpretation, to expedite prosecution, Applicants have amended claims 8, 14, and 24 to clarify the positioning of the claimed "first side of a printed medium."

Claim 8 as amended recites:

8. A device for supplying an overcoat sheet to a printed medium comprising:
a heated roll;
a backing roll that forms a nip with the heated roll;
a transport mechanism that moves the printed medium through the nip with a first side of a printed medium facing the heated roll; and
a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink;
wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll;
wherein the printed medium thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium.
(Emphasis added.)

Application No.: 10/679,607

Docket No.: 200400266-1

Claim 14 as amended recites:

14. A method for applying a sheet to a printed medium comprising:
providing a printed medium including a first side and a second side, an overcoat sheet, a heated roll, and a backing roll, wherein the heated roll and backing roll form a nip through which the printed medium travels;
transporting the printed medium to the nip formed between the heated roll and the backing roll such that the heated roll heats the first side of the printed medium, the first side of the printed medium facing the heated roll;
providing a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink; and
drying the printed ink and attaching or fusing the overcoat sheet to the second side of the printed medium;
wherein the printed medium thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium.
(Emphasis added.)

Claim 24 as amended recites:

24. A device for supplying an overcoat sheet to a printed medium comprising:
a heated roll;
a backing roll that forms a nip with the heated roll;
a transport mechanism that moves the printed medium through the nip with a first side of a printed medium facing the heated roll; and
a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink;
wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll;
wherein the heated roll alone supplies sufficient heat to fuse or attach the overcoat sheet to the second side of the printed medium.
(Emphasis added.)

The amendments are fully supported in the specification. See, e.g., Figures 1 and 5 and paragraphs 0021 and 0029 of Applicants' specification.

Application No.: 10/679,607

Docket No.: 200400266-1

As shown in Figure 4 of Arcaro (which is reproduced on page 3 of the Office Action), the overcoat film 107 is applied to the same side of the document that is facing the heated roller 105. Arcaro, col. 1, lines 32-35. Therefore, Arcaro does not disclose "the first side of the printed medium facing the heated roll" and "a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium," as recited in amended claims 8 and 24 and as similarly recited in amended claim 14. For at least these reasons, the rejection of independent claims 8, 14, and 24 should be withdrawn.

B. Dependent Claims 9, 11-13, 15, and 21

The §102(e) rejection of dependent claims 9, 11-13, 15, and 21 should be withdrawn at least because of the respective dependencies of these claims from independent claim 8 or 14.

In addition, these dependent claims also recite independently patentable subject matter. Merely by way of example, claim 21, which depends from claim 8, recites "wherein the printed medium curves around at least a portion of the heated roll before being moved through the nip." In rejecting this claim, the Examiner points to the heat roller 105 shown in Figure 4 of Arcaro. However, Figure 4 of Arcaro clearly illustrates that the document proceeds directly to and through the nip formed by the heat roller 105 and the pressure roller 103 without ever curving around the heat roll 105 before being moved through the nip. The document in Figure 4 of Arcaro is completely straight and without curvature up to and through the feed through the nip. Therefore, Arcaro does not disclose "wherein the printed medium curves around at least a portion of the heated roll before being moved through the nip," as recited in

Application No.: 10/679,607

Docket No.: 200400266-1

claim 21. For at least this reason, the §102(e) rejection of claim 21 should be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

A. Independent Claim 1

Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Kikuchi et al. (US Patent No. 20020027586). Applicants respectfully traverse this rejection.

Applicants have amended independent claim 1, which now recites:

1. A printing device comprising:
 - a heated roll;
 - a backing roll;
 - a transport mechanism that moves a printed medium against the heated roll, a printed side of the printed medium facing away from the heated roll during a first pass of the printed medium against the heated roll, the heated roll and the backing roll being spaced apart during the first pass;
 - an inverting mechanism that inverts the printed medium; and
 - a means for supplying a separate sheet to the heated roll;wherein the transport mechanism moves the inverted printed medium for a second pass against the heated roll, the printed side of the inverted printed medium facing the heated roll during the second pass, the heated roll and the backing roll forming a nip during the second pass such that the inverted printed medium passes through the nip and the separate sheet is fused to the printed side of the printed medium.
- (Emphasis added.)

The amendment is fully supported in the specification. See, e.g., Figures 2-4 and paragraphs 0024-0028 of Applicants' specification.

Arcaro and Kikuchi, considered either alone or together, do not teach or suggest "a printed side of the printed medium facing away from the heated roll during

Application No.: 10/679,607

Docket No.: 200400266-1

a first pass of the printed medium against the heated roll" and "the printed side of the inverted printed medium facing the heated roll during the second pass," as recited in amended claim 1. The sections of Arcaro and Kikuchi relied upon in the Office Action show only a single pass of a document against a heated roller and do not teach or suggest inverting the document. Moreover, in both Arcaro and Kikuchi, only one side of the document faces the heated roller. Arcaro, Figure 4 and Kikuchi, Figure 1.

The other prior art references of record do not cure, nor does the Examiner allege that they cure, these deficiencies of Arcaro and Kikuchi. In Pearson (US Patent No. 6,089,703), for example, only one side of a print medium faces the heated roll 28. At least because the prior art of record does not teach or suggest all the elements recited in claim 1 as amended, the §103(a) rejection of independent claim 1 should be withdrawn.

B. Claims 6, 18, and 20

Like independent claim 1, claims 6, 18, and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Kikuchi. Each of these claims depends from independent claim 1. Therefore, the rejection of these claims should be withdrawn at least because of the respective dependencies of the claims to independent claim 1.

C. Claims 3 and 7

Claims 3 and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Kikuchi and further in view of Pearson (US Patent No. 6,089,703). Applicants have amended claim 7 in view of the amendments to claim 1.

Application No.: 10/679,607

Docket No.: 200400266-1

As amended, claim 7 recites, "A device as recited in claim 1, wherein the inverting mechanism includes a duplexer."

Claims 3 and 7 each depends from independent claim 1. Pearson is cited in the Office Action only for an alleged teaching of a heated backing roll and as such does not cure the deficiencies of Arcaro and Kikuchi described above in relation to independent claim 1. Therefore, the rejection of these claims should be withdrawn at least because of the respective dependencies of the claims to independent claim 1.

D. Claims 10 and 16

Claims 10 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Pearson. Each of these claims depends from independent claim 8. Pearson is cited in the Office Action only for an alleged teaching of a heated backing roll and as such does not cure the deficiencies of Arcaro described above in relation to independent claims 8, 14, and 24. Therefore, the §103(a) rejection of claims 10 and 16 should be withdrawn at least because of the respective dependencies of the claims to independent claim 8.

E. Claim 19

Claim 19 was rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Kikuchi and further in view of Chiba et al. (US Patent No. 4,913,991). Claim 19 depends from independent claim 1. Chiba is cited in the Office Action only for an alleged teaching of a non-wetting material and as such does not cure the deficiencies of Arcaro and Kikuchi described above in relation to independent claim 1. Therefore, the §103(a) rejection of claim 19 should be withdrawn at least because of

Application No.: 10/679,607

Docket No.: 200400266-1

the dependency of the claim to independent claim 1.

F. Claim 22

Claim 22 was rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Chiba. Claim 22 depends from independent claim 8. Chiba is cited in the Office Action only for an alleged teaching of a non-wetting material and as such does not cure the deficiencies of Arcaro described above in relation to independent claims 8, 14, and 24. Therefore, the §103(a) rejection of claim 22 should be withdrawn at least because of the dependency of the claim to independent claim 8.

G. Claim 23

Claim 23 was rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro in view of Nishikawa et al. (US Patent No. 7,086,727). Claim 23 depends from independent claim 8. Nishikawa is cited in the Office Action only for an alleged teaching of a fan for applying heat to a printed medium and as such does not cure the deficiencies of Arcaro described above in relation to independent claims 8, 14, and 24. Therefore, the §103(a) rejection of claim 23 should be withdrawn at least because of the dependency of the claim to independent claim 8.

Application No.: 10/679,607

Docket No.: 200400266-1

Conclusion

Reconsideration and allowance are respectfully requested. In view of the above, each of the presently pending claims in this application is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes any fee due has been addressed in the accompanying transmittal charging Deposit Account No. 08-2025, under Order No. 200400266-1 from which the undersigned is authorized to draw.

Dated: November 20, 2006

Respectfully submitted,

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